

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING
Curriculum applicable to students who entered as freshmen beginning school year 2020-2021

FIRST SEMESTER						SECOND SEMESTER							
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES	CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CHM031	CHEMISTRY FOR ENGINEERS	3.0	-	3.0	None	None	CHM021L	CHEMISTRY FOR ENGINEERS (LABORATORY)	3.0	-	1.0	None	CHM031
ENG023	RECEPTIVE COMMUNICATION SKILLS	3.0	-	3.0	None	None	CHM133	ANALYTICAL CHEMISTRY	4.0	-	4.0	CHM031	None
HUM021	LOGIC AND CRITICAL THINKING	3.0	-	3.0	None	None	CHM133L	ANALYTICAL CHEMISTRY (LABORATORY)	-	3.0	1.0	CHM031L	CHM133
HUM039	ETHICS	3.0	-	3.0	None	None	CPE001L	COMPUTER FUNDAMENTALS AND PROGRAMMING 1 (LAB)	-	3.0	1.0	None	None
MATH025	MATHEMATICS IN THE MODERN WORLD	3.0	-	3.0	None	None	DRAW021W	ENGINEERING DRAWING 1	-	3.0	1.0	None	None
MATH053	ENGINEERING CALCULUS 1	5.0	-	5.0	None	None	ENG024	WRITING FOR ACADEMIC STUDIES	3.0	-	3.0	None	None
SS021	UNDERSTANDING THE SELF	3.0	-	3.0	None	None	MATH054	ENGINEERING CALCULUS 2	5.0	-	5.0	MATH053	None
VE021	LIFE COACHING SERIES 1	1.0	-	(1.0)	None	None	PHY033	PHYSICS FOR ENGINEERS	4.0	-	4.0	MATH053	None
	TOTAL	24.0	0.0	23.0			PHY033L	PHYSICS FOR ENGINEERS (LABORATORY)	-	3.0	1.0	MATH053	PHY033
							SS026	SCIENCE, TECHNOLOGY AND SOCIETY	3.0	-	3.0	None	None
							NSTP010	NATIONAL SERVICE TRAINING PROGRAM 1	3.0	-	(3.0)	None	None
							VE022	LIFE COACHING SERIES 2	1.0	-	(1.0)	VE021	None
							TOTAL	23.0	15.0	24.0			

FIRST SEMESTER						SECOND SEMESTER							
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES	CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CHE100	CHEMICAL ENGINEERING ORIENTATION	1.0	-	1.0	None	None	CHE130P-1	MOMENTUM TRANSFER (PAIRED)	2.0	3.0	3.0	CHE111P, MATH056	None
CHE111P	CHE CALCULATIONS 1 (PAIRED)	2.0	3.0	3.0	CHM031	None	CHE157-1	PHYSICAL CHEMISTRY FOR ENGINEERS 1	2.0	-	2.0	MATH054, CHM133	None
CHM143	ORGANIC CHEMISTRY	4.0	-	4.0	CHM133	None	CHE157L-1	PHYSICAL CHEMISTRY FOR ENGINEERS 1 (LABORATORY)	-	3.0	1.0	MATH054, CHM133	CHE157-1
CHM143L	ORGANIC CHEMISTRY (LABORATORY)	-	3.0	1.0	CHM133L	CHM143	EEO102	ENGINEERING ECONOMY	3.0	-	3.0	IE101-1	None
DRAW023L	COMPUTER-AIDED DRAFTING (LABORATORY)	-	3.0	1.0	DRAW021W	None	ENG041	PURPOSIVE COMMUNICATION	3.0	-	3.0	None	None
ECE121L	COMPUTER-AIDED CALCULATIONS (LABORATORY)	-	3.0	1.0	None	None	EENV102	ENVIRONMENTAL SCIENCE AND ENGINEERING	3.0	-	3.0	CHM031	None
MATH056	DIFFERENTIAL EQUATIONS	3.0	-	3.0	MATH054	None	MATH116	ADVANCED ENGINEERING MATHEMATICS	3.0	-	3.0	MATH056	None
IE101-1	ENGINEERING DATA ANALYSIS	3.0	-	3.0	MATH053	None	MATH116E	ENGINEERING MATHEMATICS EXIT EXAM	-	-	0.0	IE101-1, MATH056	MATH116
MEE100-1	ENGINEERING MECHANICS	3.0	-	3.0	MATH054, PHY033	None	SS023	THE CONTEMPORARY WORLD	3.0	-	3.0	None	None
SS022	READINGS IN PHILIPPINE HISTORY	3.0	-	3.0	None	None	SS085	PHILIPPINE INDIGENOUS COMMUNITIES	3.0	-	3.0	None	None
PE021	MOVEMENT ENHANCEMENT	-	2.0	(2.0)	None	None	PE022	FITNESS EXERCISES	-	2.0	(2.0)	PE021	None
NSTP011P	NATIONAL SERVICE TRAINING PROGRAM 2 (PAIRED)	2.0	3.0	(3.0)	NSTP010	None		TOTAL	22.0	8.0	24.0		
VE023	LIFE COACHING SERIES 3	1.0	-	(1.0)	VE022	None							
	TOTAL	22.0	17.0	23.0									

SUMMER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EMGT100	ENGINEERING MANAGEMENT	2.0	-	2.0	EEO102	None
GEELEC01	GE ELECTIVE 1	3.0	-	3.0	None	None
SAF102	BASIC OCCUPATIONAL SAFETY AND HEALTH	3.0	-	3.0	CHM031	None
	TOTAL	8.0	0.0	8.0		

FIRST SEMESTER						SECOND SEMESTER							
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CHE123P-1	CHEMICAL ENGINEERING THERMODYNAMICS (PAIRED)	2.0	3.0	3.0	CHE157-1, CHE111P	None	CAP200D	CAPSTONE DESIGN / THESIS 1 (LABORATORY)	-	3.0	1.0	RES101	None
CHE134P-1	HEAT AND MASS TRANSFER 1 (PAIRED)	3.0	3.0	4.0	CHE130P-1	None	CHE103-1	PROCESS SAFETY	1.0	-	1.0	CHM031	None
CHE158-1	PHYSICAL CHEMISTRY FOR ENGINEERS 2	2.0	-	2.0	CHE157-1	None	CHE124P-1	SOLUTIONS THERMODYNAMICS (PAIRED)	2.0	3.0	3.0	CHE123P-1, MATH116	None
CHE158L-1	PHYSICAL CHEMISTRY FOR ENGINEERS 2 (LABORATORY)	-	3.0	1.0	CHE157L-1	CHE158-1	CHE131L-1	CHEMICAL ENGINEERING 1 (LABORATORY)	-	3.0	1.0	CHE134P-1	None
EE105-1	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	2.0	-	2.0	PHY033	None	CHE133P-1	PARTICLE TECHNOLOGY (PAIRED)	2.0	3.0	3.0	CHE130P-1	None
EE105L-1	BASIC ELECTRICAL AND ELECTRONICS ENGINEERING (LAB)	-	3.0	1.0	PHY033L	EE105-1	CHE135P-1	SEPARATION PROCESSES (PAIRED)	2.0	3.0	3.0	CHE123P-1, CHE134P-1	None
EE105-1E	GENERAL ENGINEERING AND APPLIED SCIENCES EXIT EXAM	-	-	0.0	CHM031, PHY033, EEO102, EENV102, EMGT100	EE105-1	CHE150-1	CHEMICAL PROCESS INDUSTRIES	3.0	-	3.0	CHM143	None
MATH161	NUMERICAL METHODS	3.0	-	3.0	MATH116	None	CHE172P	CHEMICAL REACTION ENGINEERING (PAIRED)	3.0	3.0	4.0	CHE158-1, MATH116, CHE134P-1	None
MATH161L	NUMERICAL METHODS (LABORATORY)	-	3.0	1.0	MATH116, ECE121L	MATH161	CHE172E	PHYSICAL AND CHEMICAL PRINCIPLES EXIT EXAM	3.0	3.0	4.0	CHE158-1	CHE172P
MSE102	FUNDAMENTALS OF MATERIAL SCIENCE AND ENGINEERING	3.0	-	3.0	CHM031	None	CHE184L-1	COMPUTER APPLICATIONS IN CHE (LABORATORY)	-	3.0	1.0	CPE001L	CHE135P-1
RES101	METHODS OF RESEARCH	3.0	-	3.0	IE101-1, ENG024	None	CHEELEC01	CHE ELECTIVE 1	3.0	-	3.0	None	None
PE023	PHYSICAL ACTIVITY TOWARDS HEALTH AND FITNESS 1	-	2.0	(2.0)	PE022	None	PE024	PHYSICAL ACTIVITY TOWARDS HEALTH AND FITNESS 2	-	2.0	(2.0)	PE023	None
	TOTAL	18.0	17.0	23.0				TOTAL	16.0	23.0	23.0		

SUMMER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CHE199R-1	CHE PRACTICUM	-	20.0	3.0	CHE130P-1, HUM039	None
	TOTAL	0.0	20.0	3.0		

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CAP200D-1	CAPSTONE DESIGN / THESIS 2 (LABORATORY)	-	3.0	1.0	CAP200D	None	CHE143P-1	CHEMICAL ENGINEERING DESIGN 2 (PAIRED)	2.0	3.0	3.0	CHE142P-1	None
CAP200D-2	CAPSTONE DESIGN / THESIS 3 (LABORATORY)	-	3.0	1.0	CAP200D	CAP200D-1	CHE143E	CHEMICAL ENGINEERING PRINCIPLES 2 EXIT EXAM	-	-	0.0	CHE181, CHE182-1, CHE185-1	None
CHE132L-1	CHEMICAL ENGINEERING 2 (LABORATORY)	-	3.0	1.0	CHE131L-1	None	CHE150L-1	CHEMICAL PROCESS (LABORATORY)	-	3.0	1.0	CHE142P-1	None
CHE142P-1	CHEMICAL ENGINEERING DESIGN 1 (PAIRED)	1.0	3.0	2.0	CHE133P-1, CHE150-1, CHE172P	None	CHE180P-1	PROCESS DYNAMICS AND CONTROL (PAIRED)	2.0	3.0	3.0	MATH116, ECE121L	None
CHE142E	CHEMICAL ENGINEERING PRINCIPLES 1 EXIT EXAM	-	-	0.0	CHE133P-1, CHE135P-1, CHE172P	CHE142P-1	CHE185-1	INDUSTRIAL WASTE MANAGEMENT AND CONTROL	3.0	-	3.0	EENV102, CHE133P-1	None
CHE181	CHE LAWS AND ETHICS	1.0	-	1.0	HUM039	None	CHE191F-1	CHE FIELD TRIPS AND SEMINARS (FIELD)	-	3.0	1.0	CHE172P	None
CHE182-1	BIOCHEMICAL ENGINEERING	3.0	-	3.0	CHE172P, CHM143	None	CHEELEC03	CHE ELECTIVE 3	3.0	-	3.0	None	None
CHEELEC02	CHE ELECTIVE 2	3.0	-	3.0	None	None	SS038	THE LIFE AND WORKS OF JOSE RIZAL	3.0	-	3.0	None	None
GEELEC02	GE ELECTIVE 2	3.0	-	3.0	None	None	CHE198-2	CHE CORRELATION 2	6.0	-	(1.0)	EE105-1E, CHE172E, CHE142E, CHE185-1	CHE143E
HUM034	ART APPRECIATION	3.0	-	3.0	None	None		TOTAL	19.0	12.0	17.0		
TEC100	TECHNOPRENEURSHIP	3.0	-	3.0	EMGT100	None							
COR198	CORRELATION 1	6.0	-	(1.0)	CHM031, MATH116, MATH116E, PHY033, EEO102	None							
	TOTAL	23.0	12.0	21.0									

Required Units of Electives : 9 units

PROFESSIONAL ELECTIVE TITLE 2020

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CHE221	RENEWABLE ENERGY TECHNOLOGIES	3.0	-	3.0	CHM031, PHY033	None
CHE222	ENERGY MANAGEMENT	3.0	-	3.0	CHM031, EMGT100	None
CHE231	AIR POLLUTION CONTROL	3.0	-	3.0	EENV102	None
CHE232	SOLID WASTE MANAGEMENT	3.0	-	3.0	EENV102	None
CHE233	HAZARDOUS WASTE MANAGEMENT	3.0	-	3.0	EENV102	None
CHE241	SOAPS AND DETERGENTS	3.0	-	3.0	CHM143, CHM143L	None
CHE242	FOOD PROCESSING TECHNOLOGIES	3.0	-	3.0	CHM143, CHE150-1	None
CHE243	COSMETEUTICALS	3.0	-	3.0	CHM143, CHE150-1	None
CHE251	INTRODUCTION TO PETROLEUM ENGINEERING	3.0	-	3.0	CHE150-1	None
CHE252	POLYMER ENGINEERING	3.0	-	3.0	CHE150-1	None
CHE253	PLASTICS TECHNOLOGY	3.0	-	3.0	CHE150-1	None
CHE261	MOLECULAR BIOLOGY	3.0	-	3.0	CHM143	None
CHE262	ENZYME TECHNOLOGIES	3.0	-	3.0	CHM143	None
CHE271	MICROELECTRONICS MATERIALS FOR CHE	3.0	-	3.0	PHY033, MSE102	None
CHE272	NANOTECHNOLOGY	3.0	-	3.0	CHE133P-1	None
CHE194	SPECIAL TOPICS IN CHEMICAL ENGINEERING	3.0	-	3.0	CHE133P-1, CHE123P-1	None
AENG008	AB PRODUCTS PROCESSING AND STORAGE	3.0	-	3.0	None	None
AENG009	DESIGN AND MANAGEMENT OF AB PROCESSING SYSTEMS	3.0	-	3.0	None	None
AENG010	PROPERTIES OF AB MATERIALS	3.0	-	3.0	MSE102	None
AENG011	FOOD PROCESSES ENGINEERING	3.0	-	3.0	CHM143, CHE150-1	None

NOTE: Elective courses offering per semester will depend on the availability of instructor and compliance of prerequisite courses for specific elective course.

GENERAL EDUCATION ELECTIVE TITLE 2020

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
ENV075	ENVIRONMENTAL SCIENCE	3.0	-	3.0	None	None
ENV076	PEOPLE AND THE EARTH'S ECOSYSTEM	3.0	-	3.0	None	None
ENV078	THE ENTREPRENEURIAL MIND	3.0	-	3.0	None	None
HUM080	PHILIPPINE POPULAR CULTURE	3.0	-	3.0	None	None
HUM081	INDIGENOUS CREATIVE CRAFTS	3.0	-	3.0	None	None
HUM082	READING VISUAL ART	3.0	-	3.0	None	None
HUM083	GREAT BOOKS	3.0	-	3.0	None	None
SS084	RELIGIONS, RELIGIOUS EXPERIENCES AND SPIRITUALITY	3.0	-	3.0	None	None
SS086	GENDER AND SOCIETY	3.0	-	3.0	None	None